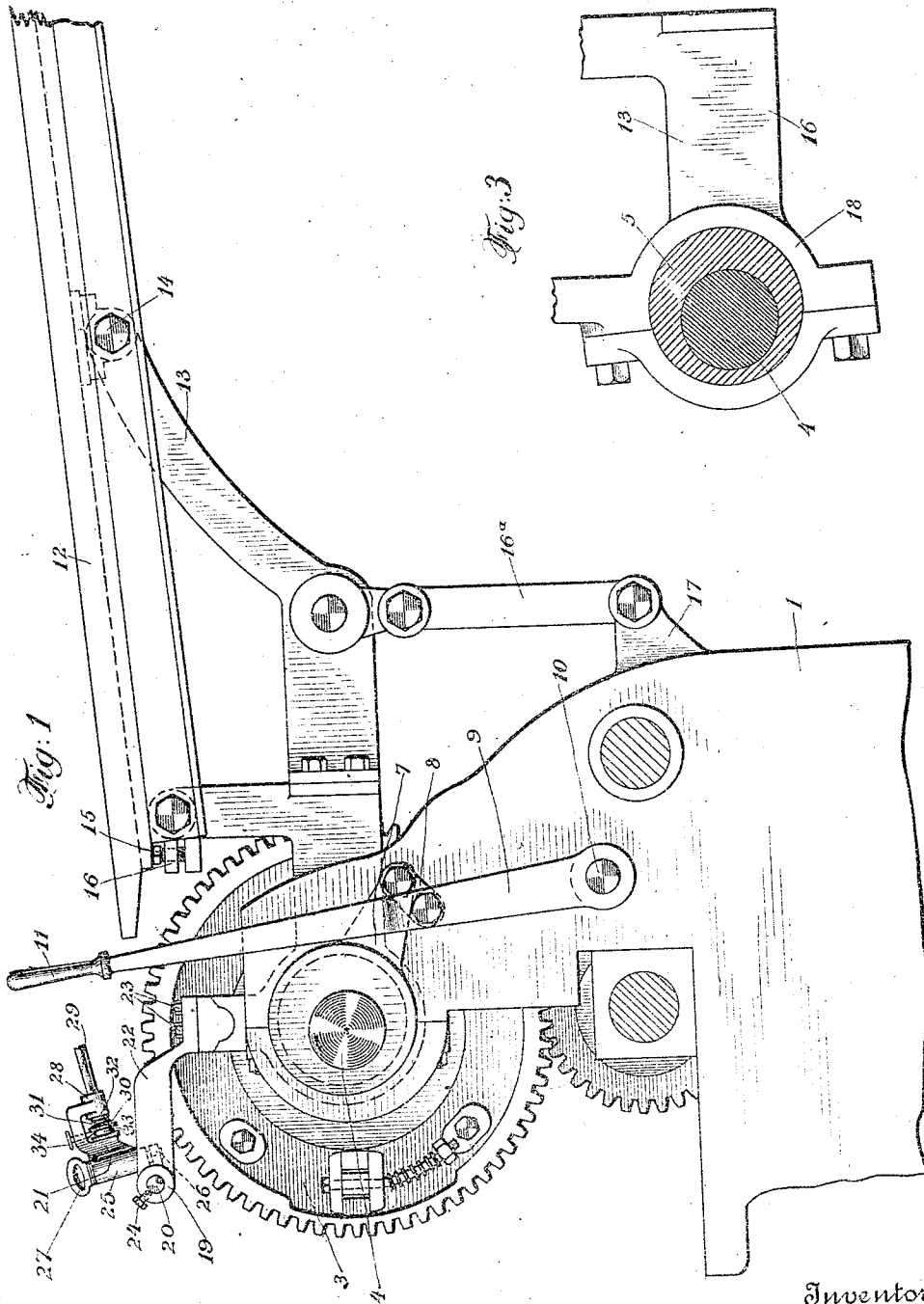


C. VAN MIDDLESWORTH.
FEEDING MECHANISM FOR PAPER.
APPLICATION FILED OCT. 15, 1909.

Patented Nov. 7, 1911.

2 SHEETS—SHEET 1.

1,008,289.



Witnesses:
W. Meikle.
H. B. Prindle

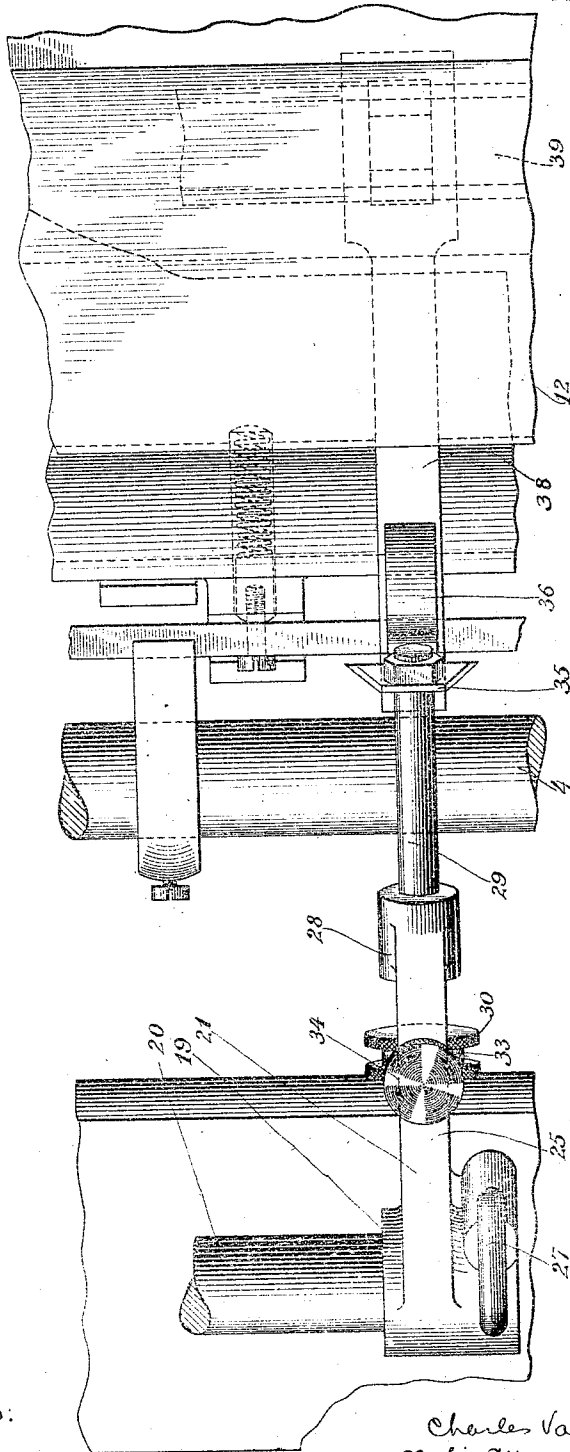
Inventor
Charles Van Middlesworth
By his Attorney
Prindle Shingler

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Fig. 2.



Witnesses:
M. Meikle
H. B. Crindle

Inventor
Charles Van Middlesworth
By his Attorneys
Crindle & Wright

UNITED STATES PATENT OFFICE.

CHARLES VAN MIDDLESWORTH, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE VAN DYCK GRAVURE COMPANY, OF NEW YORK, N. Y.

FEEDING MECHANISM FOR PAPER.

1,008,289.

Specification of Letters Patent.

Patented Nov. 7, 1911.

Original application filed November 23, 1908. Serial No. 464,096. Divided and this application filed October 15, 1909. Serial No. 522,753.

To all whom it may concern:

Be it known that I, CHARLES VAN MIDDLESWORTH, of the borough of Brooklyn, in the county of Kings, and in the State of New York, have invented a certain new and useful Improvement in Feeding Mechanism for Paper, and do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to an improvement in paper feeding mechanisms for printing presses, and relates especially to an improvement whereby paper can be more accurately fed to a press, so that in case multiple impressions are to be made upon the same sheet of paper a perfect alinement of the different impressions can be obtained.

This is a divisional application of my application for printing machines, Serial No. 464,096, filed November 23rd, 1908.

I have shown one embodiment of my invention in the accompanying drawings, in which—

Figure 1 is a side elevation of a printing press equipped with my improvement; Fig. 2 is a fragmental plan view of the same; and Fig. 3 is an enlarged view of a detail.

In the accompanying drawings, 1 represents a side standard for supporting the parts of the printing machine, only one of these standards being shown in Fig. 1, although there is a similar standard on the other side of the machine. Supported in the standards 1 there is an impression cylinder 3 having its journals 4 located in an eccentric sleeve 5 supported in the journal bearings 6. The eccentric sleeve 5 has attached thereto an arm 7, to the end of which is attached a link 8 designed to connect the eccentric sleeve with a manually-operated lever 9. The link 8 and the lower portion of the manually-operated lever 9 constitute a toggle mechanism. The lower end of the lever 9 is pivoted at 10 to the side standard 1, while the other end of the lever is provided with a handle 11, so that the same may be conveniently moved to raise and lower the impression cylinder.

A feeding table 12 is adapted to be supported at its outer end from the standards, and at its inner end from the journals 5. This is accomplished in the following manner:—The table has attached thereto on its under face a rigid frame or supporting

bracket 13, the table being pivoted to the same at 14 near the outer end of the table, while the inner end of the table is supported by means of an adjustable screw 15, screw-threaded in an upright 16 of the bracket 13, and having its head located in contact with the under face of the table. The outer end of the bracket 13 is supported from the standards 1 and 2 through the agency of links 16^a, one of which is situated on either side of the printing machine. The links 16^a are connected at their lower ends to the standards by means of an integral bracket 17 projecting from each of the side standards. The inner end of the supporting bracket 13 is supported directly upon the eccentric sleeve 5 at each end of the impression cylinder, as shown in Fig. 3, the bracket for this purpose being provided with a circular housing 18 surrounding the eccentric sleeve 5. It will thus be seen that by the parts above described, a movement of the handle 11 effects a movement simultaneously either up or down of the impression cylinder 3 and the feeding table 12. The supporting bracket 13 also supports journal bearings 19, located on either side of the impression cylinder, for a shaft 20, which carries a series of drop guides 21. The bearings 19 are situated in detachable arms 22, which are bolted to the upper face of the circular housing 18 by means of the bolts 23. I prevent the shaft 20 from becoming displaced out of its proper position in a lateral direction, by inserting screws 24 in the journal bearings 19 so as to register with depressions or grooves located at these points in the shaft 20.

Each of the drop guides 21 comprises a bracket 25 having a split sleeve adapted to surround the shaft 20 and be tightened upon the same by means of a screw 26 having a thumb-piece 27. In the end of the bracket 25 I support, by means of a journal bearing 28, a rod 29, the inner end of which is screw-threaded so as to carry a milled nut 30, which nut 30 is situated in an opening 31 on the end of the bracket 25. A spring 32 is provided around the rod 29, between the journal bearing 28 and the milled nut 30, so as to press the milled nut 30 continually in a rearward direction against the bracket 25. The nut 30 is furthermore provided with an annular recess 33 in which a screw-

threaded pin 34 is adapted to be projected and tightened so as to maintain the milled nut in its adjusted position. The end of the rod 29 carries a depending arm 35, which is located in a vertical position. To this arm 35 is riveted a curved guide 36, the detail construction of which forms no part of the invention intended to be covered by this application. In the downward position of the drop guide, the arm 35 is designed to rest against a tongue 38 which extends from beneath the table 12, from which it is supported by means of a transverse strip 39, as shown in Fig. 2.

The shaft 20 carries a series of drop guides of the character described and the table 12 carries a series of tongues 38 cooperating with said drop guides. It will now be observed that a movement of the handle 11 so as to raise or lower the impression cylinder 3, results simultaneously in a corresponding movement of the drop guides 21 and the table 12 with its attached tongues 38.

While I have described my invention above in detail, I wish it to be understood that many changes might be made therein without departing from the spirit thereof.

I claim:

1. In a device of the character described, the combination of a feeding table, a printing couple, a rigid frame upon which the feeding table and one member of the couple are both mounted, and means for adjusting

the frame and table to and from the other member of the printing couple.

2. In a device of the character described, the combination of a feeding table, a printing couple, guides for controlling the feeding of paper from the table, a frame upon which the table, one member of the printing couple and the guides are all carried, and means for adjusting the frame to and from the other member of the printing couple.

3. In a device of the character described, the combination of a feeding table, a printing couple, a rigid frame upon which the feeding table and one member of the couple are both mounted, and a toggle mechanism for adjusting the frame and table to and from the other member of the printing couple.

4. In a device of the character described, the combination of a feeding table, a printing couple, guides for controlling the feeding of paper from the table, a frame upon which the table, one member of the printing couple and the guides are all carried, and a toggle mechanism for adjusting the frame to and from the other member of the printing couple.

In testimony that I claim the foregoing I have hereunto set my hand.

CHARLES VAN MIDDLESWORTH.

Witnesses:

GEORGE B. PRINDLE,
A. NEWCOMB.